UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,430	10/31/2001	Roland M. Hochmuth	10017761-1	2418

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EXAMINER
CHUNG, DANIEL J

ART UNIT	PAPER NUMBER
2672	5

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/001,430	HOCHMUTH ET AL.
	Examiner	Art Unit
	Daniel J Chung	2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-28_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-28_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _4_ .
4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: .

U.S. Patent and Trademark Office
PTOL-326 (Rev. 04-01)   Office Action Summary   Part of Paper No. 5

DETAILED ACTION

Information Disclosure Statement

Receipt is acknowledged of Applicant's Information Disclosure Statement of 6-

27-2002, which has been placed in the application file and considered by the Examiner.

Drawings

The drawings are not objected to by the Examiner.

Specification

Please review the application and correct all informalities.

Please fill the blank space with proper serial numbers in Specification of

application. (Spec p.1 line 3)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13, 16-18 and 26-28 are rejected under 35 U.S.C. 102(b) as being

anticipated by Rostoker et al (6,016,401).

Regarding claim 1, Rostoker et al discloses that the claimed feature of a graphics adapter, comprising: a frame buffer [i.e. "frame memories", "DRAM", "ROM", "Buffer", "host memory"] operable to store graphics image data; and a network interface ["network interface circuit", "network interface"] operable to receive at least a portion of said graphics image data, said network interface further operable to format said received graphics image data into a plurality of packets ["packet"] for transmission over a communication network. (See Abstract, Fig 3-5, Fig 16, Fig 29, Fig 33, Fig 36, Fig 42-44)

Regarding claim 2, Rostoker et al discloses that a network interface port coupled to said network interface, said plurality of packets being transmitted from said network interface to said communication network via said network interface port ["network ports" i.e. 542-544]. (See Fig 29, col 2 line 40-42)

Regarding claim 3, Rostoker et al discloses that network interface port is selected from the group consisting of an Ethernet port, an Infiniband port, and a wireless network transceiver. (See Fig 42-44, col 17 line 34-43, col 25 line 46-50)

Regarding claim 4, Rostoker et al discloses that a compression unit ["compressing decoder circuit"] coupled to said frame buffer and operable to compress graphics image data of said frame buffer into compressed graphics image data. (See col 5 line 1-6)

Regarding claim 5, Rostoker et al discloses that network interface further

operable to format said compressed graphics image data [i.e. "MPEG packets"] into a

plurality of packets for transmission over said communication network. (See col 5 line

11)

Regarding claim 6, Rostoker et al discloses that a video transmitter operable to

transmit graphics image data from said frame buffer to a processor-based system

associated with said graphics adapter. (See Fig 1-6, Fig 15)

Regarding claim 7, Rostoker et al discloses that video transmitter is selected

from the group consisting of a RAMDAC (Random Access Memory Digital to Analog

Converter) and a DVI (Digital Visual Interface) transmitter. (See Fig 1-6, Fig 15)

Regarding claim 8, Rostoker et al discloses that a video output port coupled to

said video transmitter, said graphics image data being transmitted from said frame

buffer via said video output port. (See Fig 1-6, Fig 15)

Regarding claim 9, Rostoker et al discloses that video output port is selected

from the group consisting of an analog video port and a digital video port. (See Fig 1-6,

Fig 15)

Regarding claim 10, Rostoker et al discloses that plurality of packets being

transmitted to at least one destination device. (See Fig 1)

Regarding claim 11, Rostoker et al discloses that a first selected plurality of said

plurality of packets is for transmission to a first destination device and a second

selected plurality of said plurality of packets is for transmission to a second destination

device. (See Fig 1)

Regarding claim 12, Rostoker et al discloses that the claimed feature of a

method for transmitting graphics image data over a communication network,

comprising: logically dividing a frame buffer of a graphics adapter into a plurality of

segments, each of said plurality of segments storing graphics image data corresponding

to a destination device of a plurality of destination devices; selecting a segment of said

plurality of segments corresponding to a destination device of said plurality of

destination devices; and formatting at least a portion of said graphics image data stored

in said selected segment into a plurality of packets for transmission by a network

interface of said graphics adapter to said destination device over said communication

network. (See Abstract, Fig 3-5, Fig 16, Fig 29, Fig 33, Fig 36, Fig 42-44)

Regarding claim 13, Rostoker et al discloses that transmitting said plurality of

packets to said destination device over said communication network. (See Fig 1)

Regarding claim 16, Rostoker et al discloses that adding identification information ["packet header information", "packet identification"] identifying said destination device to each of said plurality of packets. (See col 8 line 14)

Regarding claim 17, Rostoker et al discloses that identification information is an Internet Protocol (IP) address of said destination device. (See col 8 line 14)

Regarding claim 18, Rostoker et al discloses that transmitting said plurality of packets to another destination device of said plurality of destination devices. (See Fig 1)

Regarding claims 26-28, claims 26-28 are similar in scope to the claims 1-3, and thus the rejections to claims 1-3 hereinabove are also applicable to claims 26-28.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14-15 and 19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker et al in view of Popa (6,006,231).

Regarding claim 19, Rostoker et al does not specifically discloses that "comparing graphics image data of a new image for a destination device with graphics image data of a previous image for said destination device stored in a frame buffer of a graphics adapter remote from said destination device; selecting blocks of graphics image data of said new image that are different from corresponding blocks of graphics image data of said previous image." However, such limitations are shown in the teaching of Popa. (See Abstract line 10-14, col 1 line 64-col 2 line 12) ["only the difference between the first and second version [new image] to supplement the previously downloaded data of the first version [previous image] of the image"] It would have been obvious to one skilled in the art to incorporate the teaching of Popa into the teaching of Rostoker et al, in order to provide "faster browsing and downloading of images, reduction in storage space and the ability to obtain high quality printed output" (See col 3 line 40-42), as such improvement is also advantageously desirable in the teaching of Rostoker et al for transmitting of digital data with faster time at the reduced storage space and communication costs.

Regarding claim 20, Rostoker et al discloses that transmitting said plurality of packets to at least one destination device over said communication network. (See

Abstract, Fig 1)

Regarding claim 21, Rostoker et al discloses that compressing said selected blocks of graphics image data prior to formatting said selected blocks of graphics image data. (See col 5 line 1-6)

Regarding claim 22, Rostoker et al discloses that adding identification information identifying said selected blocks to said plurality of packets. (See col 8 line 14)

Regarding claim 23, Rostoker et al discloses that identification information comprises block numbers for said selected blocks. (See col 8 line 14)

Regarding claim 24, Rostoker et al discloses that identification information comprises coordinate information for a plurality of corners of said selected blocks. (See col 8 line 14)

Regarding claim 25, refer to the discussion for the claim 19 hereinabove, Popa discloses that waiting for a request for graphics image data from at least one of said at least one destination device. (See Fig 3)

Regarding claim 14, refer to the discussion for the claim 19 hereinabove, Popa

discloses that receiving an update request from said destination device of said plurality

of destination devices prior to said selecting step. (See Fig 3)

Regarding claim 15, refer to the discussion for the claim 19 hereinabove, Popa

discloses that selecting step comprising selecting, in response to receiving said update

request, said segment of said plurality of segments corresponding to said destination

device of said plurality of destination devices. (See Fig 3)

Claim 19 is once again rejected under 35 U.S.C. 103(a) as being

unpatentable over Rostoker et al in view of Kloba et al (6,553,412).

Regarding claim 19, Rostoker et al does not specifically discloses that

"comparing graphics image data of a new image for a destination device with graphics

image data of a previous image for said destination device stored in a frame buffer of a

graphics adapter remote from said destination device; selecting blocks of graphics

image data of said new image that are different from corresponding blocks of graphics

image data of said previous image." However, such limitations are shown in the

teaching of Kloba et al. (See step 208-210 in Fig 2, col 14 line 55-col 15 line 23) It would

have been obvious to one skilled in the art to incorporate the teaching of Kloba et al into

the teaching of Rostoker et al, in order to modify/update image data within network at

rapid manner, as such improvement is also advantageously desirable in the teaching of

Rostoker et al for transmitting of digital data with faster time at the reduced storage

space and communication costs.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Any inquiry concerning this communication or earlier

communications from the examiner should be directed to Daniel J. Chung whose

telephone number is (703) 306-3419. He can normally be reached Monday-Thursday

and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by

telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be

reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Technology Center 2600 Customer Service Office

whose telephone number is (703) 306-0377.

djc
October 3, 2003

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600